- Final -

ENVIRONMENTAL CONDITION OF PROPERTY REPORT

for the

NAVY AND MARINE CORPS
RESERVE CENTER
READING, PENNSYLVANIA

Department of the Navy BRAC Program Management Office
Department of the Navy
Base Realignment and Closure
Program Management Office
1455 Frazee Road, Suite 900
San Diego, California 92108-4310

04 May 2006

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ABBREVIATIONS, ACRONYMS, AND SYMBOLS

AST	Aboveground Storage Tank
BFP	Backflow Preventers
BRAC	Base Realignment and Closure
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERFA	Community Environmental Response Facilitation Act
CESQG	Conditionally Exempt Small Quantity Generator
CO	Commanding Officer
CWA	Clean Water Act
DoD	Department of Defense
ECP	Environmental Condition of Property
EFH	Essential Fish Habitat
FEMA	Federal Emergency Management Agency
gpm	Gallons Per Minute
IRP	Installation Restoration Program
JP	jet petroleum
LBP	Lead-Based Paint
mBtu/hr	million British thermal units per hour
MEC	Munitions and Explosives of Concern
NAVRAMP	Navy Radon Assessment and Mitigation Program
NMCRC	Navy and Marine Corps Reserve Center
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRHP	National Register of Historic Places
OPNAV	Office of the Chief of Naval Operations/Operational Navy
PADEP	Pennsylvania Department of Environmental Protection
PCB	Polychlorinated Biphenyl
pCi/L	Picocuries Per Liter
PMO	Program Management Office
POL	petroleum, oil & lubricants
ppm	Parts Per Million
RAWA	Reading Area Water Authority
SDWA	Safe Drinking Water Act
U.S.	United States
U.S.C.	United States Code
USEPA	Unites States Environmental Protection Agency
USMC	United States Marine Corps.
UST	Underground Storage Tank

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EXECUTIVE SUMMARY

This Environmental Condition of Property (ECP) report for the Navy and Marine Corps Reserve Center (NMCRC) Reading, Pennsylvania summarizes the historical, cultural, and environmental conditions of the property as part of Base Realignment and Closure (BRAC) documentation associated with closure of NMCRC Reading. Information was reviewed with installation points of contact to ensure all data are current and accurate. Where information was not available, the sources contacted and reference materials sought were documented.

NMCRC Reading was built in 1957 and commissioned in 1959. NMCRC Reading was renamed in March 2006 to Navy Operational Support Center, Reading (Lewandowski 2006).

NMCRC Reading currently encompasses 7.06 acres in the City of Reading, Pennsylvania. The NMCRC Reading facility is housed in a two-story brick administrative building and includes two brick garages, a howitzer shed, retention pond, and two paved surface parking areas.

The mission of NMCRC Reading is to provide administrative assistance to the U.S. Navy and U.S. Marine Corps (USMC). To fulfill this mission, the NMCRC Reading maintains records, provides training, arranges travel and compensation, and maintains current information on Naval Reserve members in case of deployment (Burton 2005, Heffner 2005, Hibbetts 2005, Pawelski 2006, Rimmey 2005a, Stone 2005).

A brief summary of ECP findings is provided below by subject area.

- **Classifications of Environmental Conditions**. This ECP Report is not intended to identify uncontaminated property in compliance with the Community Environmental Response Facilitation Act (CERFA) and Department of Defense (DoD) policy. The Navy will comply with its statutory requirement to identify uncontaminated property through additional evaluations and documentation.
- **Installation Restoration Program Sites.** The U.S. Navy has not identified any Installation Restoration Program (IRP) sites at NMCRC Reading (USEPA 2005) and the facility is not on the National Priorities List (NPL).
- **Aboveground Storage Tanks.** There are no former or current aboveground storage tank (AST) locations at NMCRC Reading (Engineering Field Activity 2003, Rimmey 2005a, Stone 2005).
- **Underground Storage Tanks.** There are currently no underground storage tanks (USTs) located at NMCRC Reading. An 8,000 gallon UST was removed in the late 1990's due to the conversion to natural gas heating at NMCRC Reading (Engineering Field Activity 2003, Hibbetts 2005, Hibbetts 2006a, Hibbetts 2006b, Rimmey 2005a, Stone 2005).
- **Munitions and Explosives of Concern.** There are no munitions and explosives of concern (MEC) located at NMCRC Reading. The basement of the NMCRC Reading administrative building contains a storage room for small arms and weapons cleaning supplies. Anecdotal accounts by current personnel suggest that the current basement storage room may have been utilized as an indoor firing range at one time; however,

no formal documentation exists to support this information (Burton 2005, Heffner 2005, Hibbetts 2005, Pawelski 2006, Rimmey 2005a, Stone 2005).

- **Hazardous Waste.** NMCRC Reading has been classified by U.S. Environmental Protection Agency (USEPA) as a Conditionally Exempt Small Quantity Generator (CESQG) of hazardous waste; however, there are no waste manifests or other records to validate this status (Engineering Field Activity 2003). A portable locker located outside of the garage is used for storage of used paint, 5-gallon storage cans inside the garage are used for temporary storage of used JP-fuel oil, and 55-gallon drums inside the garage are used for storage of used oil and coolant (antifreeze) (Burton 2006, Hibbetts 2006d, Pawelski 2006).
- **Polychlorinated Biphenyls.** NMCRC Reading has been certified as free of polychlorinated biphenyls (PCBs) (Carroll 1995). The Instructions For PCB-Free Activity Report states that PCB transformers, capacitors, and hydraulic systems at NMCRC Reading have been tested and confirmed to not contain PCBs exceeding a concentration of 50 parts per million (ppm) or greater (Carroll 1995, Rimmey 2005a).
- **Radiological Materials.** No radiological materials have been used or located at NMCRC Reading (Rimmey 2005a, Stone 2005).
- **Pesticides.** Pesticide use at NMCRC Reading is described by site personnel as limited to occasional use of household quantities of insecticides (aerosol wasp spray). Additional applications are performed by contracted pesticide services, although no documentation was available regarding these activities (Engineering Field Activity 2003, Rimmey 2005a, Stone 2005).
- **Asbestos.** According to site personnel, an asbestos survey was conducted at the NMCRC Reading in December 1990; however, documentation of survey results was not available for review (Engineering Field Activity 2003, Rimmey 2005a). Based upon the age of initial construction, there is a potential for presence of asbestos-containing building materials.
- **Lead-Based Paint.** According to site personnel, testing for lead-based paint (LBP) was conducted in 2005 at NMCRC Reading; however, documentation of the analytical results is not yet unavailable (Rimmey 2005a, Stone 2005). Based upon the age of initial construction, there is a potential for the presence of LBP at NMCRC Reading.
- **Radon.** Radon surveys were conducted at NMCRC Reading in 1992, 1998, and 2005. The 1992 survey of 11 rooms in the administrative building identified one location (Room 114) with radon gas concentrations above the USEPA action level of 4.0 picoCuries per Liter (pCi/L); while the radon study conducted in 1998 identified radon concentrations of less than 4.0 pCi/L. The 2005 study of 3 administrative building rooms identified one location (Room 108) with radon gas concentrations above the USEPA action level (NAVRAMP 1995, Rimmey 2005b, Rimmey 2006b).
- **Air Quality.** Emissions-generating equipment at NMCRC Reading is limited to one natural gas-fired boiler (Engineering Field Activity 2003, Hibbetts 2006f). According to the Pennsylvania Department of Environmental Protection (PADEP), NMCRC Reading is subject to PADEP Small Combustion Units General permit requirements. However, NMCRC Reading personnel are not aware of any air permits, and no other documentation was available (PADEP 2004, Rimmey 2005a).

- **Drinking Water.** The potable water supply for NMCRC Reading is obtained from the Reading Area Water Authority (RAWA), a public utility district (City of Reading 2004, Engineering Field Activity 2003, Stone 2005). In order to comply with the Safe Drinking Water Act 9SDWA) and U.S. Naval regulations, backflow prevention devices were installed at NMCRC Reading in 2004 (Woodard & Curran 2003, Rimmey 2006a).
- **Groundwater.** The groundwater aquifer in Berks County is the Karst Formation and is Devonian in age (USGS 1997). The groundwater depth underlying the City of Reading is approximately 278 feet below the ground surface (PaGWIS 2006). There is no documentation of impacts to groundwater underlying the NMCRC Reading site.
- **Stormwater.** Stormwater runoff from the NMCRC Reading property flows into the on-site retention pond, which ultimately discharges to the City of Reading wastewater treatment plant (Hibbetts 2006e). NMCRC Reading has a Stormwater Management Policy for Vehicular Maintenance and Storage Areas (OPNAV 11010.23 1997) and operates a portable wash/containment system to prevent discharge of untreated vehicle/equipment washwater (Burton 2006, Hibbetts 2006e, Pawelski 2006).
- **Surface Water.** There are no surface water features located at NMCRC Reading (USFWS NWI 2006).
- **Wastewater.** NMCRC Reading does not operate an on-site wastewater treatment facility. Wastewater generated at NMCRC Reading enters the sanitary sewer system and is treated at the City of Reading Wastewater Treatment Plant which is a public utility (City of Reading 2004, Stone 2005).
- **Floodplains.** Federal Emergency Management Agency (FEMA) flood maps of the Reading area indicate that there are no portions of NMCRC Reading that would be inundated during a 100-year flood event (USDA 2005).
- **Wetlands and Aquatic Habitats (Special Aquatic Sites).** There are no wetland features or aquatic habitats at NMCRC Reading (USFWS NWI 2006).
- **Coastal Zone Areas.** NMCRC Reading is not located in a coastal area; therefore, Coastal Zone Protection Act considerations are not applicable.
- **Coral Reefs.** NMCRC Reading does not have any coral reef habitat; therefore, coral reef protection issues are not applicable.
- **Fisheries.** There is no Essential Fish Habitat (EFH) designation for the NMCRC Reading due to the absence of on-site surface water features; therefore, the Magnuson-Stevens Fishery Conservation and Management Act is not applicable.
- **Marine Mammals.** The Marine Mammal Protection Act is not applicable for NMCRC Reading because there is no marine habitat present.
- **Threatened, Endangered, and Other Sensitive Species.** There are no known populations of State or Federally-listed rare, threatened, or endangered plant or animal species residing at NMCRC Reading (USFWS 2006).
- **Geologic Hazards.** There are no geological hazards present at NMCRC Reading (PA DCNR 2006).
- **Historic Resources.** A Heritage Assets Survey conducted in 2001 concluded that there are no historical sites at NMCRC Reading (HASSS 2001).

- **Archaeological Resources.** A Cultural Resources Survey and Assessment survey was conducted at NMCRC Reading to evaluate their eligibility for the National Register of Historic Places (NRHP). According to the survey, NMCRC Reading is not older than 50 years; therefore, it does not qualify for inclusion on the NRHP (TC&B 1997).
- **Native American Graves.** A survey has not been conducted at NMCRC Reading to identify Native American graves.
- **Solid Wastes.** According to site personnel, the solid waste generated by NMCRC Reading is stored in an outside dumpster and disposed of by A.J. Blosenski Disposal (Hibbetts 2006d)
- **Universal Waste.** Universal wastes generated at NMCRC Reading are limited to fluorescent, high pressure sodium and mercury vapor light bulbs as well as small quantities of lithium batteries. The disposal of the universal wastes is conducted by a qualified licensed professional contracting company (Hibbetts 2006a, Hibbetts 2006c, Hibbetts 2006d).
- **Medical Waste.** Site personnel indicate that NMCRC Reading generates approximately less than one cubic foot of medical waste annually. Medical wastes are stored in containers marked “Biohazards” and are shipped to Panola County Resources Recovery Site 01 in Carthage, Texas for disposal (Hibbetts 2006d, Hibbetts 2006e).
- **Hazardous Materials.** Hazardous materials including fuel, oil, lubricants, and coolant (antifreeze) are stored in the garage.

1.0 Purpose

The United States (U.S.) Navy Base Realignment and Closure (BRAC) Program Management Office (PMO) prepared this Environmental Condition of Property (ECP) report for Navy and Marine Corps Reserve Center (NMCRC) Reading.

This report used existing information to summarize the historical, cultural, and environmental conditions of NMCRC Reading property. Information was reviewed with installation personnel to ensure all data are current and accurate. Where information was not available, the sources contacted and reference materials sought were documented.

The purposes of the ECP report are to:

- Provide the BRAC PMO with the information it may use to make disposal decisions regarding the property;
- Provide the public with information relative to the environmental condition of the property;
- Assist the local government in planning for the reuse of BRAC property;
- Assist Federal agencies during the Federal property screening process;
- Provide information for prospective buyers;
- Assist new owners in meeting their obligations under the U.S. Environmental Protection Agency's (USEPA's) "All Appropriate Inquiry" regulations, at such time as they become final; and
- Assist in determining appropriate responsibilities, asset valuation, liabilities, and liabilities with other parties to a transaction.

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2.0 Background

NMCRC Reading was built in 1957 and commissioned in 1959. NMCRC Reading was renamed in March 2006 to Navy Operational Support Center, Reading (Lewandowski 2006).

The mission of NMCRC Reading is to provide administrative assistance to the U.S. Navy and U.S. Marine Corps (USMC). To fulfill the mission, the NMCRC Reading maintains records, provides training, arranges travel and compensation, and maintains current information on Naval Reserve members in case of deployment (Burton 2005, Heffner 2005, Hibbetts 2005, Pawelski 2006, Rimmey 2005a, Stone 2005).

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3.0 Property Description

NMCRC Reading currently encompasses 7.06 acres in the City/Borough of Reading, Pennsylvania (**Figure 3-1**).

The NMCRC Reading facility is housed in a two-story brick administrative building and includes two brick garages, a howitzer shed, retention pond, and two paved surface parking areas.

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4.0 Environmental Condition Overview – Existing Environmental Information

As part of ECP report preparation, activities included performance of record reviews, a meeting at the BRAC PMO Northeast office, an on-site visit, and personnel interviews to document current and historic conditions at NMCRC Reading. The meeting at BRAC PMO Northeast office was conducted on September 26, 2005. On-site inspections were conducted on November 29, 2005 and January 5, 2006.

The BRAC PMO Northeast office and personnel located at NMCRC Reading provided relevant information for this ECP report. Additionally, available reports of previous environmental investigations at NMCRC Reading were obtained and reviewed. **Appendix A** presents a list of the documents that were reviewed as part of this effort. The information presented in this report was reviewed with installation personnel to ensure all data are current and accurate. Where information was not available, the sources contacted and reference materials sought were documented.

Interviews were conducted with NMCRC Reading personnel during two site visits and in subsequent telephone conversations and e-mail communications. **Appendix B** presents a list of the people contacted during preparation of the ECP report.

4.1 Classification of Environmental Conditions

The Community Environmental Response Facilitation Act (CERFA) of 1992 (amending the Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA] to add Section 120(h)(4) of CERCLA, 42 United States Code (U.S.C.) Section 9620(h)(4)) requires the identification and documentation of uncontaminated real property controlled by the Department of Defense (DoD). Components where DoD plans to make excess property available for reuse pursuant to a base closure law. Uncontaminated property is defined as any "real property on which no hazardous substances and no petroleum products or their derivatives were known to have been released, or disposed of." This includes aviation fuel and motor oil. This ECP Report is not intended to identify uncontaminated property in compliance with CERFA and DoD policy. The Navy will comply with its statutory requirement to identify uncontaminated property through additional evaluations and documentation.

4.2 Installation Restoration Program Sites

NMCRC Reading has not been placed on the National Priorities List (NPL) and NMCRC Reading has not implemented any Installation Restoration Programs (IRP) (USEPA 2005).

4.3 Storage Tanks

4.3.1 Aboveground Storage Tanks

There are no known historic or existing aboveground storage tanks (ASTs) at NMCRC Reading (Engineering Field Activity 2003, Rimmey 2005a, Stone 2005).

4.3.2 Underground Storage Tanks

There is currently no underground storage tanks (USTs) located at NMCRC Reading. An 8,000-gallon UST was removed in the late 1990's due to the conversion to natural gas heating at NMCRC Reading (Engineering Field Activity 2003, Hibbetts 2005, Hibbetts 2006a, Hibbetts 2006b, Rimmey 2005a, Stone 2005). No assessment or tank closure reports were available. Refer to **Figure 4-1** for the location of the former UST.

4.4 Munitions and Explosives of Concern

According to site personnel, there are no munitions and explosives of concern (MEC) located at NMCRC Reading. A small storage room in the basement of the main administrative building is referred to as the Armory. The Armory contains small weapons and weapons cleaning supplies (i.e., solvents, lubricants). Next to the Armory is the current locker room, which contains a traditional gym locker room that may have been utilized as an indoor firing range in the late 1960s/early 1970s. No formal documentation exists to support this information, only verbal history (Burton 2005, Heffner 2005, Hibbetts 2005, Hibbetts 2006a, Pawelski 2006, Rimmey 2005a, Stone 2005).

4.5 Hazardous Waste

NMCRC Reading has been classified by the USEPA as a Conditionally Exempt Small Quantity Generator (CESQG) of hazardous waste; however, there are no waste manifests or other records to validate this status (Engineering Field Activity 2003). SafetyKleen is contracted to manage/dispose of hazardous wastes generated at the NMCRC Reading. Further details concerning the types and quantities of hazardous waste and petroleum, oil & lubricants (POL) generated at the site were not available. A portable locker located outside of the garage is used for storage of used paint, 5-gallon storage cans inside the garage are used for temporary storage of used jet petroleum (JP) fuel oil, and 55-gallon drums inside the garage are used for storage of used oil and coolant (antifreeze) (Burton 2006, Hibbetts 2006d, Pawelski 2006) (**Figure 4-2**).

4.6 Polychlorinated Biphenyls

NMCRC Reading has been certified as free of polychlorinated biphenyls (PCBs) (Carroll 1995). The Instructions For PCB-Free Activity Report states that PCB transformers, capacitors, and hydraulic systems at NMCRC Reading have been tested and confirmed to not contain PCBs exceeding a concentration of 50 parts per million (ppm) or greater (Carroll 1995, Rimmey 2006a).

4.7 Radiological Materials

There is no documentation of past or present radiological materials located at NMCRC Reading (Rimmey 2005a, Stone 2005).

4.8 Pesticides

Pesticide uses at NMCRC Reading are described by site personnel as limited to occasional use of household quantities of insecticides (aerosol wasp spray). Additional applications are performed by contracted pesticide services, although no documentation was available regarding these activities (Engineering Field Activity 2003, Stone 2005).

4.9 Asbestos

According to site personnel, an asbestos survey was conducted at NMCRC Reading in December 1990; however, the results and associated documentation were unavailable (Engineering Field Activity 2003, Rimmey 2005a). Based upon the age of initial construction (1957), there is a potential for presence of asbestos-containing building materials.

4.10 Lead-Based Paint

According to site personnel, testing for lead-based paint (LBP) was conducted in 2005 at NMCRC Reading; however, no documentation or results are available (Burton 2005, Heffner 2005, Hibbetts 2005, Rimmey 2005a, Stone 2005). Based upon the age of initial construction (1957), site personnel conjecture that there are rooms containing LBP at NMCRC Reading (Rimmey 2005a, Stone 2005).

4.11 Radon

A preliminary radon screening was conducted at NMCRC Reading in 1992 in accordance with the Navy Radon Assessment and Mitigation Program (NAVRAMP). The 1992 survey monitored radon levels in approximately 11 of the 248 rooms in the two story brick administrative office building at NMCRC Reading (NAVRAMP 1995, Rimmey 2006b). All of the samples collected from the building at NMCRC Reading contained radon as shown in **Figure 4-3**. Of the total 11 samples, only one sample contained radon concentrations that exceeded the USEPA action level of 4 to 200 picoCuries per Liter (pCi/L) (NAVRAMP 1995, USEPA 2003). The sample that exceeded the USEPA action level had a radon concentration of 4.3 pCi/L was taken from Room #114 (NAVRAMP 1995). **Table 4-1** summarizes each room sampled and the detector(s) results for the 1992 study.

A second radon study was conducted in June of 1998 with radon samples all containing concentrations of less than 4.0 pCi/L; however, a third radon study was conducted in three separate rooms (one of which was also sampled during the 1992 survey) between July and November of 2005 as shown in **Figure 4-3**. All of the samples collected contained traces of radon; however, only one sample (from Room #108) exceeded the USEPA action level concentration at 6.1 pCi/L (Rimmey 2005b, Rimmey 2006b). The survey also concluded that Room #108 required repairs on the exhaust fan, and that retesting would occur in November of 2007 (Rimmey 2006b). **Table 4-2** summarizes each room sampled and the detector(s) results for the 2005 radon study.

4.12 Air Quality

NMCRC Reading operates only one piece of emissions-generating equipment (Burton 2005, Engineering Field Activity 2003, Heffner 2005, Hibbetts 2005, Rimmey 2005a, Stone 2005); a 1.7 million British thermal units per hour (mBtu/hr) natural gas-fired boiler (Hibbetts 2006f). According to the Pennsylvania Department of Environmental Protection (PADEP), the natural gas-fired boiler is subject to PADEP Small Combustion Units General permit requirements in accordance with 25 PA Code Chapter 127, Subchapter H; however, NMCRC Reading does not have a permit or other documentation regarding this matter (Rimmey 2005a, Stone 2005). No other air emissions-generating equipment was identified during the ECP site visits.

4.13 Water Quality

4.13.1 Drinking Water

The Safe Drinking Water Act (SDWA) of 1974, amended in 1986 and 1996, was passed to protect public health by regulating the nation's pubic drinking water supply and its sources including rivers, lakes, reservoirs, springs, and groundwater drinking wells. NMCRC Reading obtains its potable water from the Reading Area Water Authority (RAWA), a public utility district (City of Reading 2004, Engineering Field Activity 2003, Stone 2005). According to RAWA, the source of potable water is from Lake Ontelaunee (City of Reading 2004).

In addition to SDWA, state, and local regulations, the U.S. Navy requires drinking water systems to be operated and maintained by the facility. Additional requirements include the periodic testing and certification of backflow preventers (BFP). A Backflow Prevention Survey was conducted at NMCRC Reading through a visual inspection on 6 December 2002. The survey concluded that NMCRC Reading did not operate or maintain a BFP, which RAWA requires on all commercial buildings. The survey also concluded that the boiler water connection and the pressure washer associated with the wash rack both maintained proper BFP's; however, an ice machine in the parking area adjacent to the retention pond was found to be unprotected (refer to **Figure 4-3**) (Woodard & Curran 2003). In order to comply with SDWA standards, backflow prevention devices were installed at NMCRC Reading in 2004 in order to protect water supplies both inside the facility and the community potable water supplies (Woodard & Curran 2003, Rimmey 2006a).

4.13.2 Groundwater

The groundwater aquifer in Berks County is the Karst Formation and is Devonian in age. The Devonian age aquifers range in age from early to late Paleozoic and are typically formed on upturned edges on layers of hard Silurian sandstone and quartzite, but also include sandstone and shale (USGS 1997). Groundwater yields typically range from 20 to 120 gallons per minute (gpm), with local wells reported to yield as much as 1,400 gpm. The groundwater depth underlying the City of Reading is approximately 278 feet below the ground surface (PaGWIS 2006). There is no documentation of impacts to groundwater underlying the NMCRC Reading.

4.13.3 Stormwater

The Water Pollution Control Act Amendments of 1972, commonly known as the Clean Water Act (CWA), uses a variety of regulatory and non-regulatory tools to reduce pollutant discharges

into waterways and to manage polluted runoff. Under the CWA, a National Pollutant Discharge Elimination System (NPDES) permit is required for facilities discharging stormwater associated with industrial activities. Stormwater runoff from the NMCRC Reading property flows into the on-site Retention Pond (see **Figure 4-4**), which ultimately discharges to the City of Reading Wastewater Treatment plant (Hibbetts 2006e).

According to site personnel, NMCRC Reading does not discharge any harmful pollutants; therefore, NMCRC Reading does not need to apply or adhere to a NPDES permit from USEPA Region 3 (Rimmey 2005a, Stone 2005). NMCRC Reading does maintain a policy for management of stormwater for vehicle maintenance and storage areas to prevent run-off of contaminants including oils, greases, acids, sediments (suspended solids), metals, fuels, solvents, and other automotive fluids (OPNAV 11010.23 1997). The policy states that as a result of there not being an oil water separator on-site, engine steam cleaning or washing of vehicles on-site is not allowed. In addition, vehicles are inspected weekly for leaks, drips and spills. Spills greater than 5 gallons are reported to the Commanding Officer (CO) of NMCRC Reading (OPNAV 11010.23 1997). The USMC owns a portable wash/containment system (i.e., wash rack and wash pad) which was installed in 2001. The wash/containment system has been out of order since 2003. The portable wash/containment system will be removed when the USMC vacates the property (Rimmey 2005a, Stone 2005). The locations of the wash/containment systems and the retention pond are presented on **Figure 4-4**.

4.13.4 Surface Water

There are no surface water features located at NMCRC Reading (USFWS NWI 2006).

4.13.5 Wastewater

NMCRC Reading does not operate an on-site wastewater treatment facility. Wastewater generated at NMCRC Reading conveys through the sanitary sewer system to the City of Reading Wastewater Treatment Plant which is a public utility (City of Reading 2004, Stone 2005).

4.14 Natural Resources

4.14.1 Floodplains

The Federal Emergency Management Agency (FEMA) flood maps of the Reading area indicate that there are no portions of NMCRC Reading that would be inundated during a 100-year flood event (USDA 2005).

4.14.2 Wetlands and Aquatic Habitats (Special Aquatic Sites)

There are no wetland features or aquatic habitats at NMCRC Reading (USFWS NWI 2006).

4.14.3 Coastal Zone Areas

NMCRC Reading is not located in a coastal area; therefore, Coastal Zone Protection Act considerations are not applicable.

4.14.4 Coral Reefs

NMCRC Reading does not have any coral reef habitat; therefore, coral reef protection issues are not applicable.

4.14.5 Fisheries

There is no Essential Fish Habitat (EFH) designation for the NMCRC Reading due to the absence of on-site surface water features; therefore, the Magnuson-Stevens Fishery Conservation and Management Act is not applicable.

4.14.6 Marine Mammals

The Marine Mammal Protection Act is not applicable for NMCRC Reading because there is no marine habitat present.

4.14.7 Threatened, Endangered, and Other Sensitive Species

There are no known populations of State or Federally-listed rare, threatened, or endangered plant or animal species residing at NMCRC Reading (USFWS 2006).

4.14.8 Geological Hazards

There are no geological hazards identified at NMCRC Reading (PA DCNR 2006).

4.15 Cultural Resources

4.15.1 Historic Resources

A Heritage Assets Survey conducted in 2001 concluded that there are no historical sites at NMCRC Reading (HASSS 2001).

4.15.2 Archaeological Resources

A Cultural Resources Survey and Assessment survey was conducted at NMCRC Reading to evaluate their eligibility for the National Register of Historic Places (NRHP) in 1997 (TC&B 1997). According to the survey, NMCRC Reading is not older than 50 years; therefore, it does not qualify for inclusion on the NRHP (TC&B 1997).

4.15.3 Native American Graves

A survey has not been conducted at NMCRC Reading to identify Native American graves.

4.16 Solid Wastes

According to site personnel, the solid waste generated by NMCRC Reading is stored in an outside dumpster and disposed of by A.J. Blosenski Disposal, a qualified licensed contractor (Hibbetts 2006d).

4.17 Universal Wastes

Universal wastes generated at NMCRC Reading are limited to fluorescent, high pressure sodium and mercury vapor light bulbs as well as small quantities of lithium batteries. Waste lithium batteries are stored in the Used Battery Storage locker (see **Figure 4-2**). The new light bulbs are stored in a storage room within the 2 story brick office building. The disposal of the universal waste is performed by a qualified licensed professional contractor (Hibbetts 2006c, Hibbetts 2006d, Hibbetts 2006g, Hibbetts 2006h). Further details concerning the types of waste were not available.

4.18 Medical Wastes

Site personnel indicate that NMCRC Reading generates approximately less than one cubic foot of medical wastes annually. Medical wastes include contaminated needles, syringes with needles attached, blood vials, and soiled gauze. The wastes are stored in containers marked "Biohazards" and are shipped to Panola County Resources Recovery Site 01 in Carthage, Texas for disposal (Hibbetts 2006d, Hibbetts 2006e, Hibbetts 2006g). Further details concerning the types/quantities of waste were not available.

4.19 Hazardous Materials

Hazardous materials including fuel, oil, lubricants, and coolant (antifreeze) are stored in the garage (**Figure 4-5**).

4.20 Summary of Environmental Conditions

The environmental conditions at NMCRC Reading are as follows:

- Based upon the age of initial construction, there is a potential for presence of asbestos-containing building materials
- Based upon the age of initial construction, there is a potential for the presence of LBP at NMCRC Reading
- The radon samples from Room #104 and Room #108 exceeded the USEPA action level with a concentration at 6.1 pCi/L (**Figure 4-3**).

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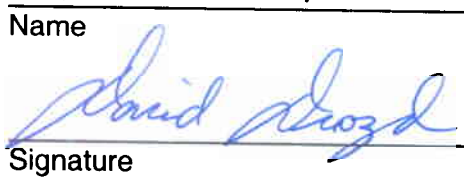
5.0 Certification

I certify that the Environmental Condition of Property Report for the Navy and Marine Corps Operational Support Center Reading, Pennsylvania May 4, 2006 and its enclosures were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. The information contained within the Environmental Condition of Property Report for the Navy and Marine Corps Operational Support Center Reading, Pennsylvania, May 4, 2006 and its enclosures is, to the best of my knowledge and belief, true, accurate and complete and accurately reflects the property's condition as of May 4, 2006 based upon my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information.

DAVID DROZD

Name



Signature

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Date

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TABLES

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Table 4-1. Radon Assessment Results for 1992

Location	Date Tested	Average Radon Level (pCi/L)
Boiler Room	5 December 1992	0.8
# 108	5 December 1992	2.2
# 113	5 December 1992	0.9
# 114	5 December 1992	4.3
# 119	5 December 1992	1.1
# 120	5 December 1992	1.5
# 134	5 December 1992	1.1
# 135	5 December 1992	0.8
# 138	5 December 1992	1.2
# 134-133	5 December 1992	2.4
# 134-133	5 December 1992	2.3

Source: Marietta 1994.

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Table 4-2. Radon Assessment Results for 2005

Location	Date Tested	Average Radon Level (pCi/L)
# 108	14 July 05 – 29 November 05	6.1
# 123	14 July 05 – 29 November 05	3.4
# 127	14 July 05 – 29 November 05	0.3

Source: Rimmey 2005b.

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FIGURES

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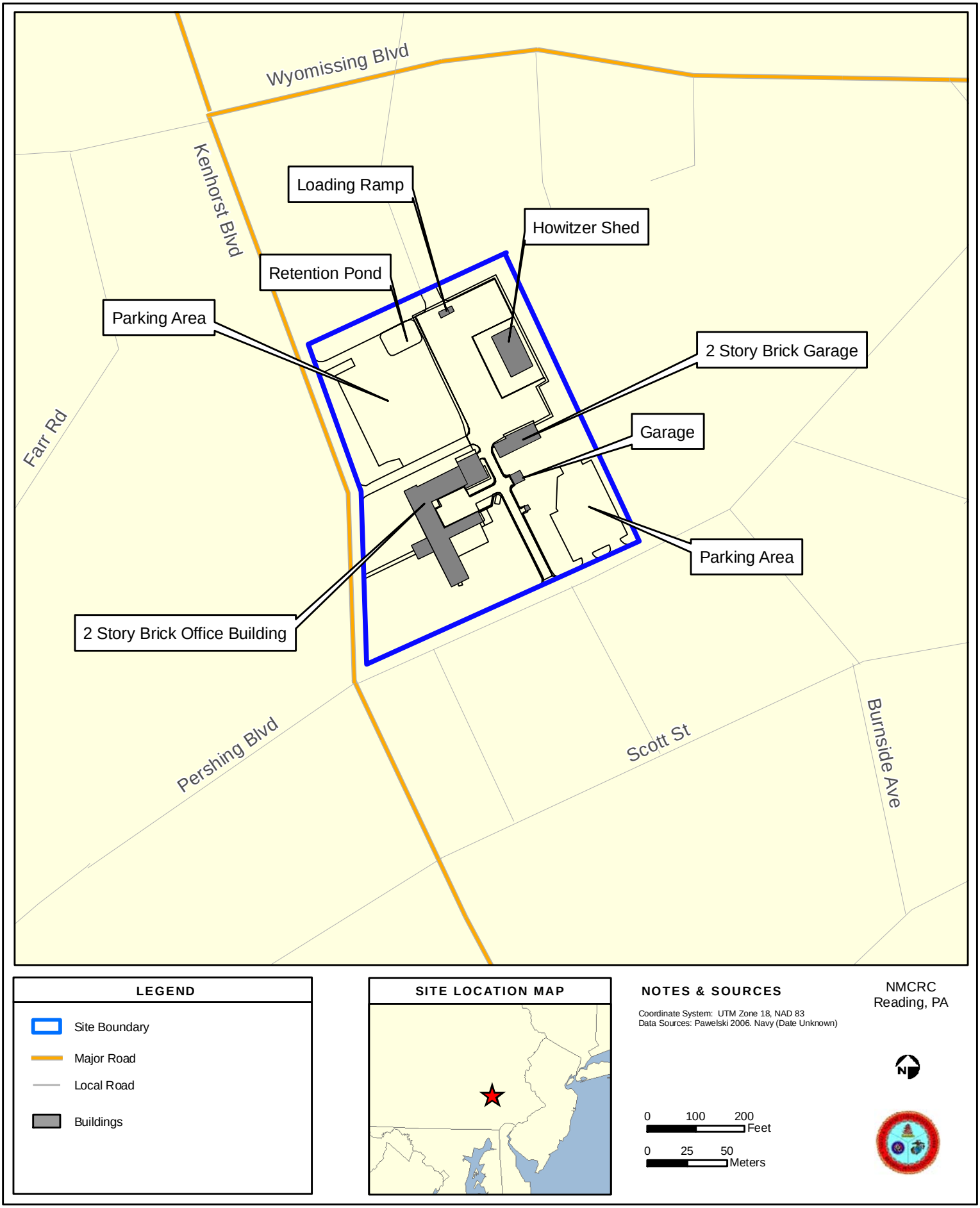


LEGEND

- Site Boundary
- Major Road
- Local Road
- Buildings

SITE LOCATION MAP

NOTES & SOURCES

Coordinate System: UTM Zone 18, NAD 83
Data Sources: Pawelski 2006. Navy (Date Unknown)

0 100 200 Feet

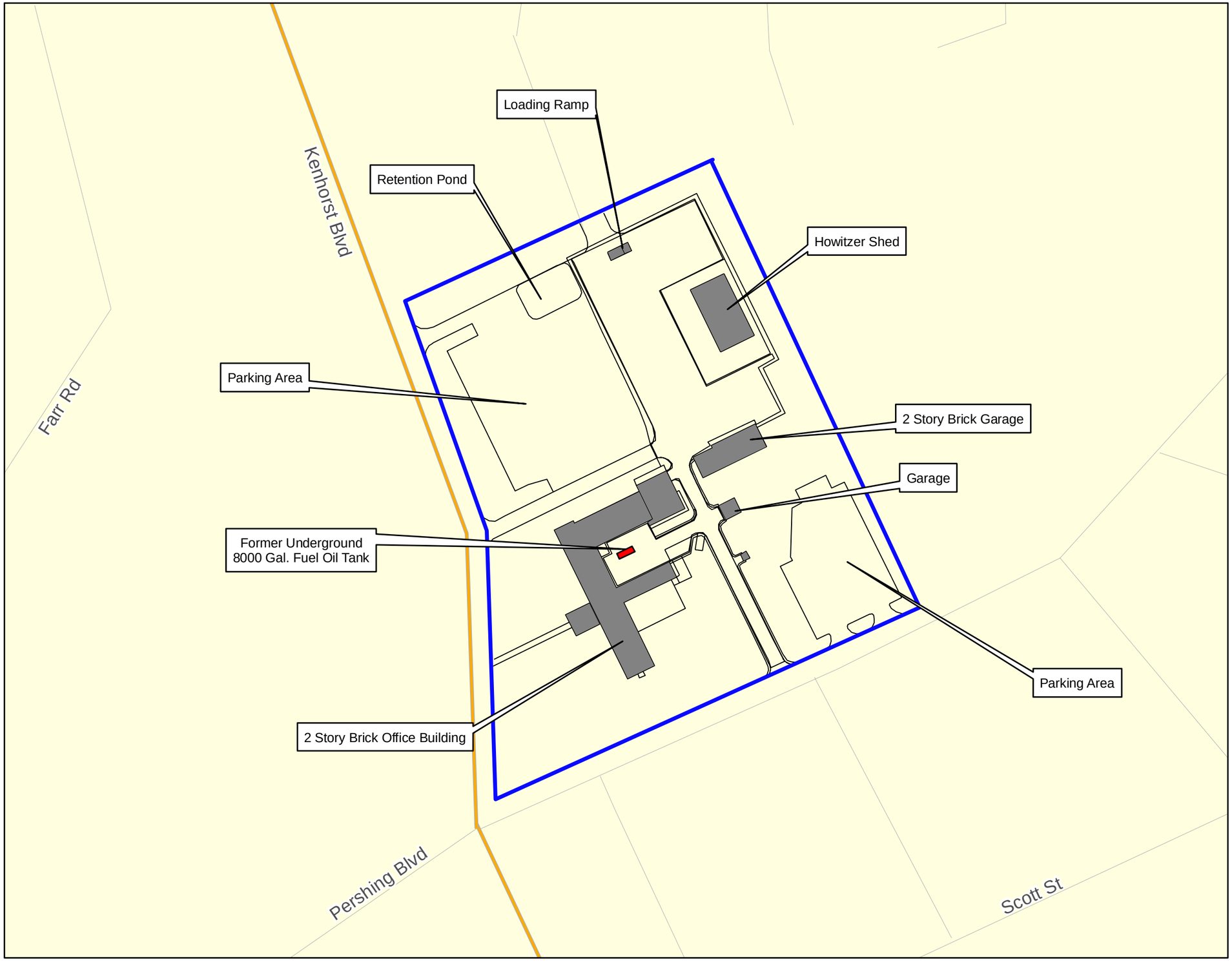
0 25 50 Meters

NMCRC
Reading, PA

SITE LOCATION MAP

FIGURE
3-1

H:\NAS\Reading\Task1\MXD\Fig_SiteLoc.mxd
H:\NAS\Reading\Task1\MXD\Fig_SiteLoc.mxd
April 6, 2006 DWN: ABF KPG CHKD: EG



TITLE

FORMER UST LOCATION

NMCRC
Reading, PA

LEGEND

- Former Underground Storage Tank
- Site Boundary
- Major Road
- Local Road
- Buildings

SITE LOCATION MAP

NOTES & SOURCES

Coordinate System: UTM Zone 18, NAD 83
Data Sources: Pawelski 2006. Navy (Date Unknown)

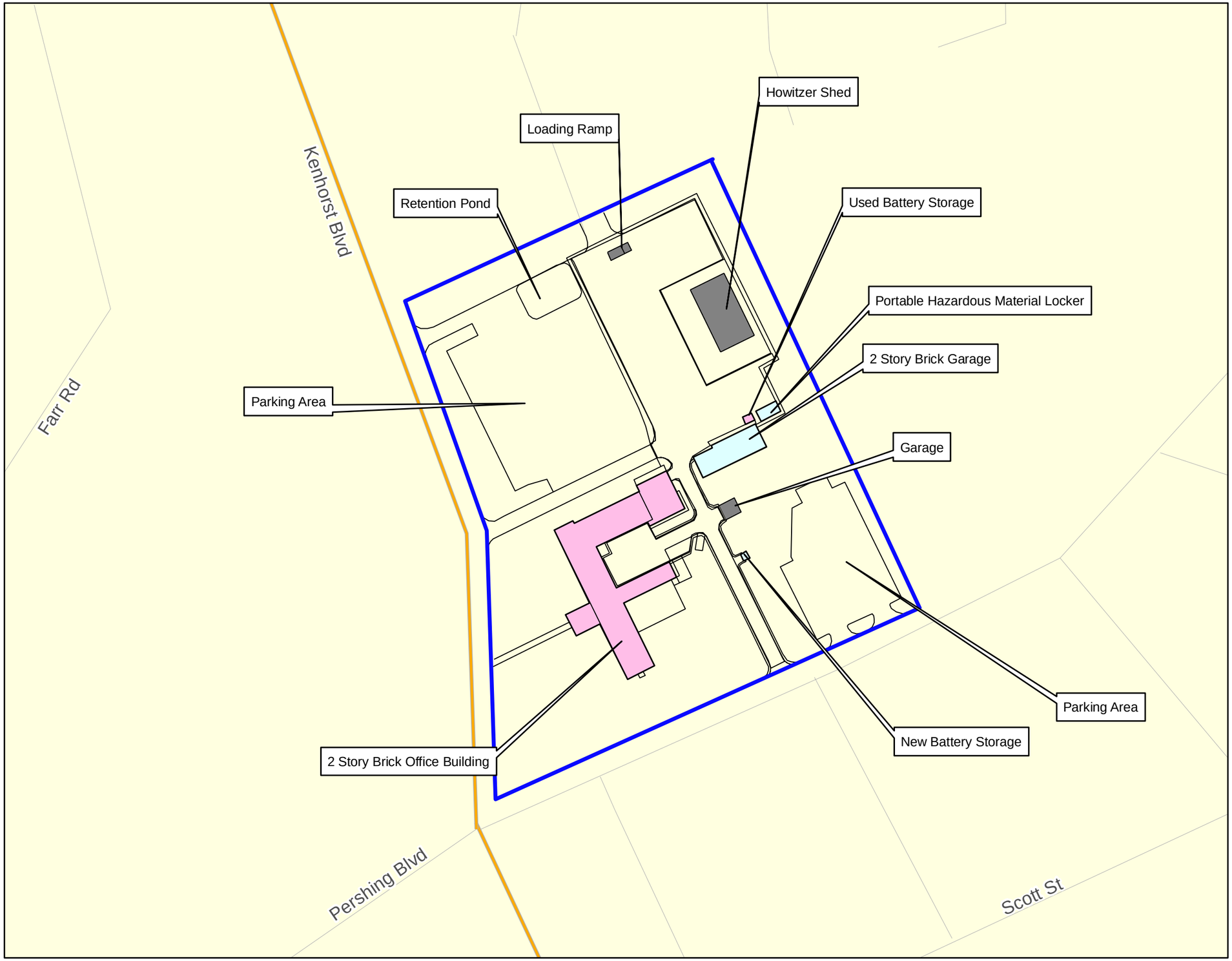
0 50 100 Feet

0 10 20 Meters

N

FIGURE
4-1

H:\NAS\Reading\Task1\MXD\Fig4-1.mxd H:\NAS\Reading\Task1\Export\Fig4-1.pdf April 6, 2006 DWN: ABF KPG CHD: EG



TITLE

LOCATIONS OF HAZARDOUS WASTE AND UNIVERSAL WASTE STORAGE

NMCRC
Reading, PA

LEGEND

- Hazardous Waste Storage
- Universal Waste Storage
- Site Boundary
- Major Road
- Local Road
- Buildings

SITE LOCATION MAP

NOTES & SOURCES

Coordinate System: UTM Zone 18, NAD 83
Data Sources: Pawelski 2006. Navy (Date Unknown)

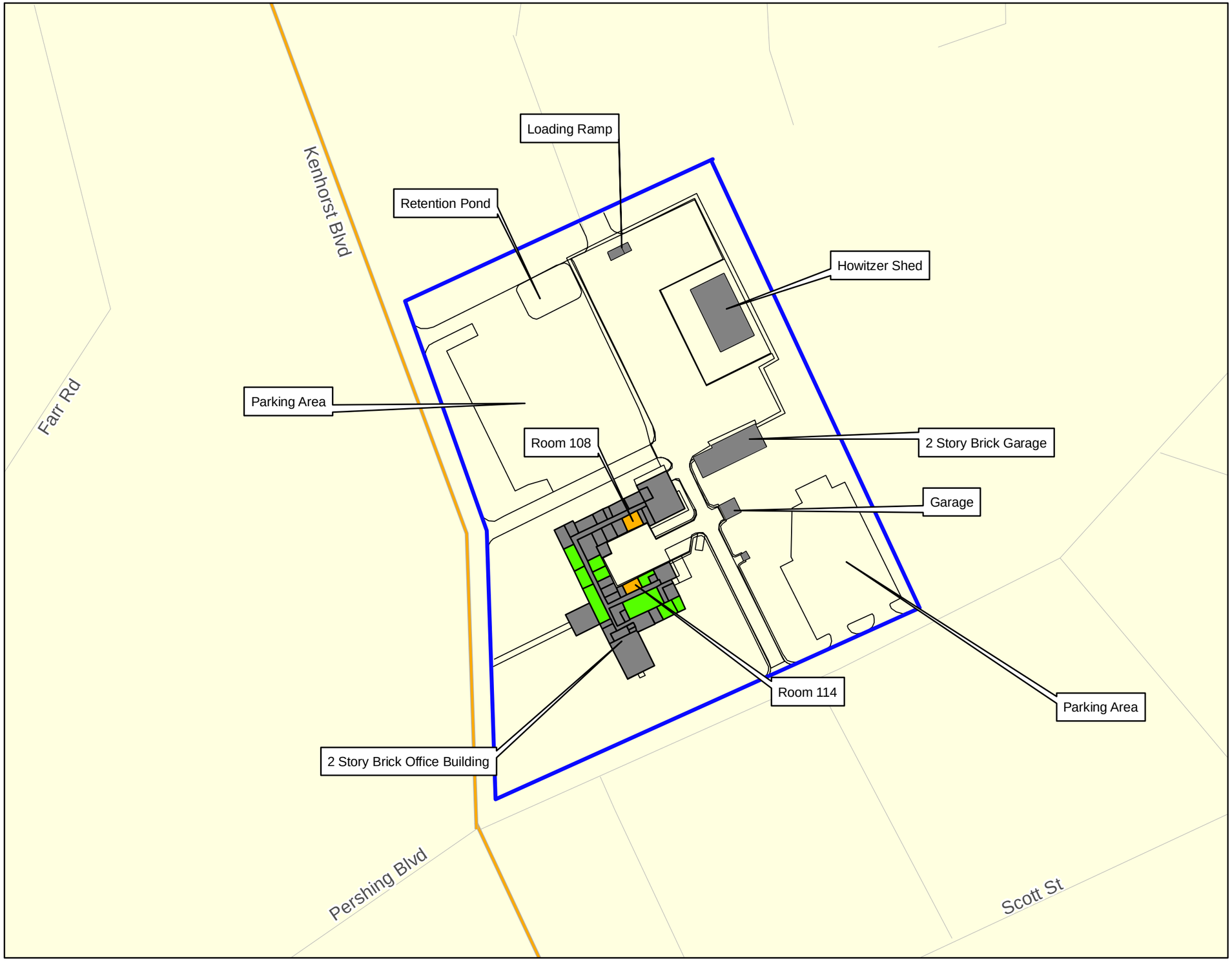
0 50 100 Feet

0 10 20 Meters

N

FIGURE
4-2

H:\NAS\Reading\Task1\MXD\Fig4-2.mxd H:\NAS\Reading\Task1\Export\Fig4-2.pdf April 10, 2006 DWN: ABF KPG CHD: EG



TITLE

LOCATIONS TESTED FOR RADON

NMCRC
Reading, PA

LEGEND

- Locations Tested for Radon (Ground Floor)
- Radon Detected above 4 pCi/L
- Site Boundary
- Major Road
- Local Road
- Buildings

SITE LOCATION MAP

NOTES & SOURCES

Coordinate System: UTM Zone 18, NAD 83
Data Sources: Rimmey 2005b. Navy (Date Unknown)

0 50 100 Feet

0 10 20 Meters

N

FIGURE
4-3

H:\NAS\Reading\Task1\MXD\Fig4-3.mxd H:\NAS\Reading\Task1\Export\Fig4-3.pdf April 10, 2006 DWN: ABF KPG CHD: EG

Loading Ramp
Washpad
Portable Wash/Containment System
Retention Pond
Howitzer Shed
Kenhorst Blvd
Farr Rd
Parking Area
2 Story Brick Garage
Garage
Parking Area
2 Story Brick Office Building
Pershing Blvd
Scott St

TITLE

WASH/CONTAINMENT SYSTEM LOCATIONS

NMCRC
Reading, PA

LEGEND

- Wash/Containment System Locations
- Site Boundary
- Major Road
- Local Road
- Buildings

SITE LOCATION MAP

NOTES & SOURCES

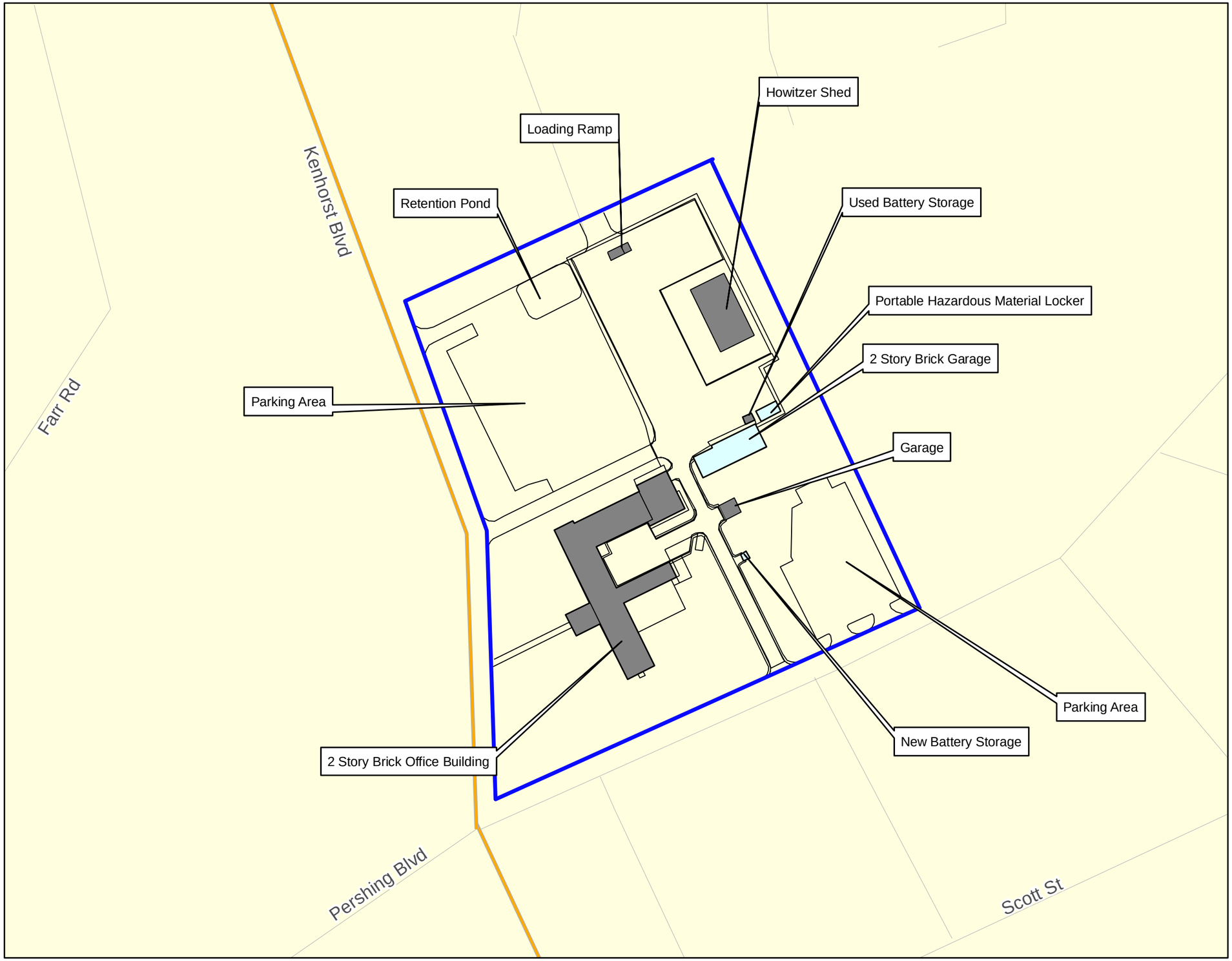
Coordinate System: UTM Zone 18, NAD 83
Data Sources: Pawelski 2006. Navy (Date Unknown)

0 50 100 Feet
0 10 20 Meters

N

FIGURE
4-4

H:\NAS\Reading\Task1\MXD\Fig4-4.mxd H:\NAS\Reading\Task1\Export\Fig4-4.pdf April 6, 2006 DWN: ABF KPG CHD: EG



TITLE

LOCATIONS OF HAZARDOUS MATERIAL STORAGE

NMCRC
Reading, PA

LEGEND

- Hazardous Materials Storage
- Site Boundary
- Major Road
- Local Road
- Buildings

SITE LOCATION MAP

NOTES & SOURCES

Coordinate System: UTM Zone 18, NAD 83
Data Sources: Pawelski 2006. Navy (Date Unknown)

0 50 100 Feet

0 10 20 Meters

N

FIGURE
4-5

H:\NAS\Reading\Task1\MXD\Fig4-5.mxd H:\NAS\Reading\Task1\Export\Fig4-5.pdf April 10, 2006 DWN: ABF KPG CHD: EG

APPENDIX A

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APPENDIX A
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APPENDIX B

List of Contacts

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APPENDIX B
List of Contacts

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